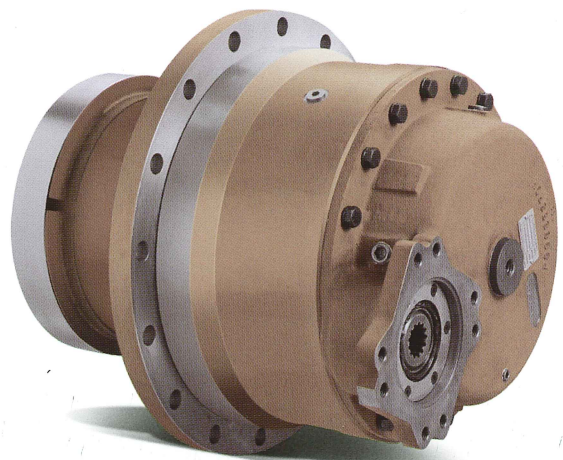
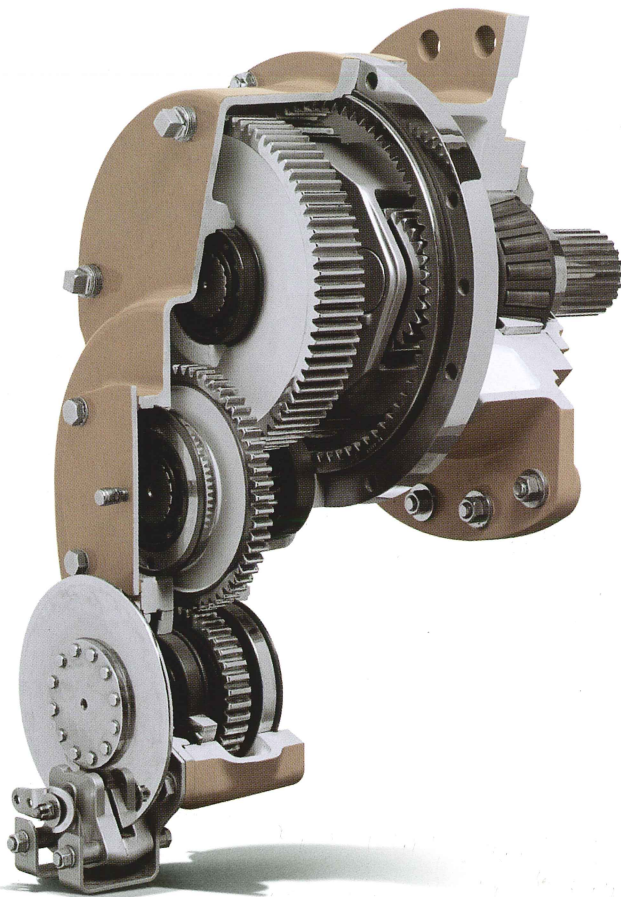
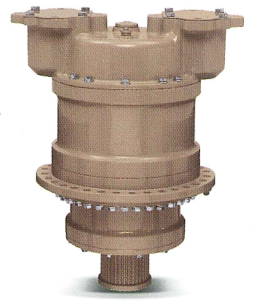


Your source for reliable Planetary Drives.

Eight models. Three types. At Funk, we offer a complete line of planetary drives for OEMs in the ag, construction, manufacturing, marine, mining, and petroleum industries.

Whether you need reducer drives, swing drives, or track drives, you can count on Funk to deliver durability, performance, and superior engineering. Our drive designs include various ratios of input gear reduction sets, along with single and multiple combinations of center section planetary gears that drive power through output arrangements to accommodate your reducer, swing, and track drive applications. Years of design research and practical application have given us an edge in the planetary drive market.



Planetary Drive Specifications

Drive type	Series model	Output torque, lb-ft (Nm)		Ratio range	Input speed, max, rpm (1)	Maximum radial load, lbs. (Kgf) (2)	Maximum input power, hp (kW)	Approx. weight, lbs. (kg) (3)
		Intermittent	Continuous					
Speed reducer	F9R	9,500 (12,880) (4)	6,000 (8,135)	3.27 - 117:1	2800	31,500 (14,287)	36 (27)	220-400 (100-181)
	F12R	12,500 (16,948)	7,500 (10,168)	7.3 - 119:1	2800	31,500 (14,287)	48 (35)	200-270 (91-122)
	F25R	25,000 (33,895)	13,800 (18,710)	7.5 - 122:1	2800	63,000 (28,570)	95 (71)	475-580 (215-263)
	P25R	25,000 (33,895)	17,000 (23,049)	45 - 104:1	4000	—	130 (97)	315-393 (143-178)
	P40R	40,000 (54,232)	26,000 (35,251)	60 - 166:1	4000	—	165 (123)	711-911 (322-413)
	P65R	65,000 (88,127)	42,000 (56,944)	51 - 179:1	4000	—	185 (138)	864-1004 (392-455)
	P120R	120,000 (162,696)	65,000 (88,127)	64 - 194:1	4000	—	225 (168)	1417-1450 (643-658)
	P200R	200,000 (271,160)	105,000 (142,359)	158 - 309:1	4000	—	325 (242)	2313-2580 (1049-1170)
Swing	F12S	7,500 (10,168)	—	7.3 - 119:1	2800	46,000 (20,862)	48 (35)	230-300 (104-136)
	F25S	13,800 (18,710)	—	7.5 - 122:1	2800	63,000 (28,570)	95 (71)	630-710 (286-322)
	P25S	17,000 (23,049)	—	45 - 104:1	4000	30,000 (13,605)	130 (97)	465-543 (211-246)
	P40S	27,000 (36,607)	—	60 - 166:1	4000	80,000 (36,281)	165 (123)	1133-1333 (514-605)
	P65S	43,000 (58,299)	—	51 - 179:1	4000	90,000 (40,816)	185 (138)	1447-1587 (656-720)
	P120S	80,000 (108,464)	—	64 - 194:1	4000	150,000 (68,027)	225 (168)	2017-2077 (915-942)
Track	P25T	25,000 (33,895)	17,000 (23,049)	45 - 104:1	4000	60,000 (27,211)	130 (97)	439-517 (199-234)
	P40T	40,000 (54,232)	26,000 (35,251)	60 - 166:1	4000	80,000 (36,281)	165 (123)	1003-1143 (455-518)
	P65T	65,000 (88,127)	42,000 (56,944)	51 - 179:1	4000	110,000 (49,887)	185 (138)	1279-1419 (580-644)
	P120T	120,000 (162,696)	65,000 (88,127)	64 - 194:1	4000	230,000 (104,308)	225 (168)	2011-2044 (912-927)

(1) Maximum input speed related to ratio and maximum output speed.

(2) Maximum radial load placed at optimum load position.

(3) Weight varies with configuration and ratio selected.

(4) Requires tapered roller planet bearings (not available with all ratios).

Planetary Gear Reductions

Funk offers a wide selection of planetary gear drives to meet the needs of your design. The Funk tradition of quality engineering and manufacturing is found in each planetary drive we produce.

We offer eight basic models of planetary drives. Each series provides unique benefits that have been developed through years of design research and practical application.

Some typical applications of Funk planetary drives include conveyers, cranes, crawlers, excavators, road rollers, track vehicles,

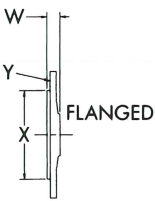
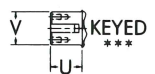

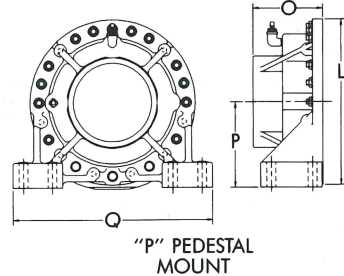
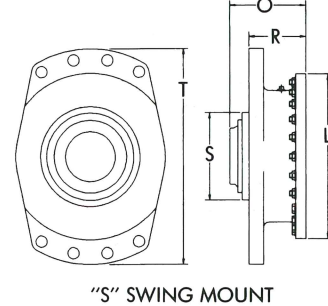
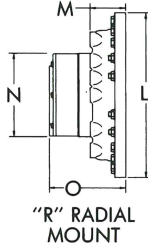
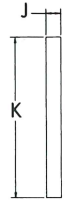
winches, and many others in the agriculture, construction, industrial, marine, mining, and petroleum industries.

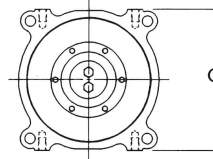
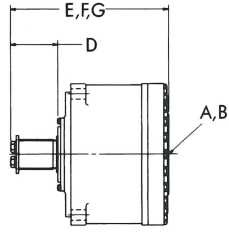
Our regional sales managers will assist you in analyzing our planetary drives and selecting the one that fits the needs of your application.

NOTE: All data and specifications subject to change without notice or obligation. Application and installation are subject to review by Funk Manufacturing.

⚠ WARNING VEHICLE RUNAWAY HAZARD Avoid serious or fatal injury. This transmission is not a braking system. Install it only if there is a braking system capable of stopping vehicle with dead engine, disengaged transmission, or loss of hydrostatic retardation. Otherwise, vehicle may roll freely, resulting in loss of control.

F Series Input-Output Options

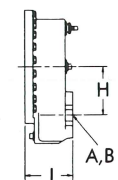
Model	Output Shafts	Output Configurations	Center Section
F12 and F25	  	  	

F9	 
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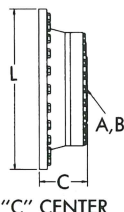
Model	Outputs	Inputs	Dimensions — Inches (Millimeters)													
F9	R	C	A Standard	B* Optional	C	D	E	F	G	* NOTE: Optional input pads may alter dimensions shown. Two-bolt SAE mounting pads available on some styles. ** One pad blocked on "O" single offset input configuration. *** Not available on F12 models.						
			SAE "C" 1/2" - 13 UNC 4 PLCS. ON 6.375 (162) B.C.D.	SAE "D" 3/4" - 10 UNC 4 PLCS. ON 9.000 (228.6) B.C.D.	14.0 (356)	3.75 (95.3)	One Stage W/SAE "D" PAD 14.88 (378) W/SAE "C" PAD 15.25 (387)	Two Stage W/SAE "D" PAD 18.13 (460) W/SAE "C" PAD 18.5 (470)	Three Stage W/SAE "D" PAD 21.38 (543) W/SAE "C" PAD 21.75 (552)							
F12	R, S	F, L, O	SAE "C" 1/2" - 13 UNC 4 PLCS. ON 6.375 (162) B.C.D.	SAE "B" 1/2" - 13 UNC 4 PLCS. ON 5.000 (127) B.C.D.	—	7.13 (181)	3.00 (76)	12.0 (305)	14.5 (368)	H	I	J	K	L	M	N
										6.0 (152)	5.94 (151)	0.5 (12.7)	14.0 (356)	14.0 (356)	3.18 (81)	7.5 (191)
F25	P, R, S	C, D, F L, O	SAE "C" 1/2" - 13 UNC 4 PLCS. ON 6.375 (162) B.C.D.	SAE "D" 3/4" - 10 UNC 4 PLCS. ON 9.000 (228.6) B.C.D.	Two Stage 6.63 (168) Three Stage 9.31 (237)	8.02 (204)	3.53 (90)	15.0 (381)	20.0 (508)	7.5 (191)	6.06 (154)	1.77 (45)	18.88 (479)	19.75 (502)	4.0 (102)	10.0 (254)

Input Configurations

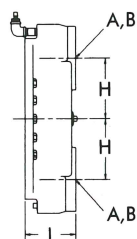
Product Information



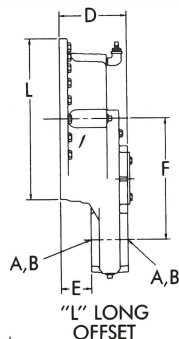
"O" SINGLE
OFFSET
(F12 MODEL)



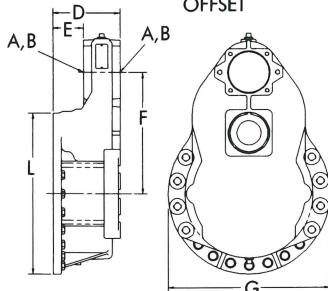
"C" CENTER



"D" DUAL AND "O" SINGLE**
OFFSET (F25 MODEL)



"L" LONG
OFFSET



"F" FLANGED

F9 Model

Output Rotation – same as input on all models

Gear Ratios

One Stage – 3.27:1, 4.89:1

Two Stage – 10.7:1, 16.0:1, 23.9:1

Three Stage – 35.0:1, 52.3:1, 78.2:1, 116.9:1

Hydraulic Motor Mounting – SAE "B," "C," or "D" 2- or 4-bolt

Input Spline – 13T, $\frac{16}{32}$ P 14T, $\frac{12}{24}$ P 13T, $\frac{8}{16}$ P, 30° P.A.

Output Shaft – splined – 23T, $\frac{8}{16}$ P, 30° P.A.

Output Shaft – keyed – 3" (Nom.) Dia. $\frac{5}{8}$ " key width

F12 Model

O Input Configuration

Output Rotation – opposite input

Gear Ratios – 7.34:1, 10.76:1, 13.15:1, 24.14:1

Hydraulic Motor Mounting – SAE "B" 2- or 4-bolt, or SAE "C" 4-bolt

Input Spline – 13T, $\frac{16}{32}$ P 14T, $\frac{12}{24}$ P, 30° P.A.

Output Shaft – splined – 29T, $\frac{8}{16}$ P, 30° P.A.

L and F Input Configurations

Output Rotation – opposite input

Gear Ratios – 19.73:1, 28.94:1, 36.22:1, 44.25:1, 53.12:1, 64.95:1, 81.22:1, 119.21

Hydraulic Motor Mounting – SAE "B" or "C," 2- or 4-bolt

Input Spline – 13T, $\frac{16}{32}$ P 14T, $\frac{12}{24}$ P, 30° P.A.

Output Shaft – splined – 29T, $\frac{8}{16}$ P, 30° P.A.

F25 Model

O and D Input Configurations

Output Rotation – opposite input

Gear Ratios – 7.50:1, 11.07:1, 13.75:1, 16.43:1, 20.00:1, 24.67:1

Hydraulic Motor Mounting – SAE "C" or "D," 4-bolt

Input Spline – 14T, $\frac{12}{24}$ P 13T, $\frac{8}{16}$ P, 30° P.A.

Output Shaft – splined – 33T, $\frac{8}{16}$ P, 30° P.A.

Output Shaft – keyed – 4" (Nom.) Dia. 1" key width

L and F Input Configurations

Output Rotation – same as input

Gear Ratios – 37.00:1, 54.61:1, 81.05:1, 121.67:1

Hydraulic Motor Mounting – SAE "C" 2- or 4-bolt or SAE "D" 4-bolt

Input Spline – 14T, $\frac{12}{24}$ P 13T, $\frac{8}{16}$ P, 30° P.A.

Output Shaft – splined – 33T, $\frac{8}{16}$ P, 30° P.A.

Output Shaft – keyed – 4" (Nom.) Dia. 1" key width

C Input Configuration

Output Rotation – same as input

Gear Ratios – 16:35:1, 24.45:1

Hydraulic Motor Mounting – SAE "B," "C," or "D" 2- or 4-bolt

Input Spline – 13T, $\frac{16}{32}$ P 14T, $\frac{12}{24}$ P 13T, $\frac{8}{16}$ P, 30° P.A.

Output Shaft – splined – 33T, $\frac{8}{16}$ P, 30° P.A.

Output Shaft – keyed – 4" (Nom.) Dia. 1" key width

Lubrication

Splash Lubrication

Recommended Lubricant – EP Gear Oil meeting

MIL-L-2105C or API Classification GL5

O	P	Q	R	S	T	U	V	W	X	Y
7.18 (182)	—	—	5.18 (132)	9.25 (235)	17.0 (432)	3.75 (95.3)	—	1.5 (37.8)	6.25 (159)	.78 Dia. (20) 10 holes on 8.75 (222) B.C.D.
9.0 (229)	10.25 (260)	22.12 (562)	6.63 (168)	10.5 (267)	25.88 (657)	3.75 (95.3)	3.998/3.997 (101.55/101.52)	1.5 (37.8)	10.62 (270)	1.03 Dia. (26.2) 10 holes on 13.188 (335) B.C.D.